

NIH Public Access Policy

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A new National Institutes of Health public access draft policy is raising a tremendous amount of interest in the scientific, patient, and publishing communities. I would like to clarify what the proposed policy is, describe its rationale, and explain why the NIH thinks this is a reasonable, balanced policy that will serve all interests.

As recently outlined (*1, 2*) the draft policy requests, but does not require or mandate, that NIH-funded investigators submit electronically to the NIH the final, peer-reviewed author's copy of their manuscript (unless the publisher agrees to replace it with the final published copy). The author's copy will be embargoed from release by NIH for 6 months after the publisher's date of publication, providing at minimum a 6-month delay between final peer review and public availability in the National Library of Medicine's (NLM) PubMed Central (PMC) (*3*).

Some are concerned that grantees or smaller or not-for-profit publishers will be harmed. This is why NIH elected to leave the decision to submit the author's copy to PMC in the hands of the investigators and their publishers. We believe that this aspect, combined with the 6-month window, will preserve the critical role of journals and publishers in peer review, editing, and scientific quality control.

We believe a stable, permanent archive of peer-reviewed, NIH-funded research publications will help NIH better meet its mission and will augment the ability of scientists to exchange information more effectively. This archive, searchable with modern information technology tools, will enable NIH to manage more efficiently and to understand better its research portfolio, to monitor its scientific productivity, and to help set research priorities. It will also help us to create an end-to-end, paperless grants-management process.

NLM and its predecessors have been responsible for building and maintaining medical literature archives for more than 150 years. NLM pioneered electronic database retrieval in the 1960s. Congress assigned to the NLM the responsibility to acquire, organize, disseminate, and preserve biomedical information for the benefit of public health. However, the proposed policy does not man-

date that PMC will be the sole repository of NIH-funded published research. In fact, NIH welcomes multiple archiving approaches.

The Internet is used increasingly to search for health-related information. For example, about 93 million Americans searched for at least 1 of 16 health topics online within the past year (*4*). In a 2003 survey, 58% of Internet users said they brought information obtained from the Internet to their doctor's office (*5*). Now, research information is largely available only to scientists, clinicians, patients, and educators through personal subscriptions or at academic and hospital libraries. It is important for NIH to provide the public access to an electronic archive of the findings resulting from publicly funded research.

NIH supports the current publishing process by encouraging publication of NIH-supported original research in scientific journals. NIH already provides an estimated \$30 million annually in direct costs for page charges and other publication costs (*6*). In addition, NIH provides funds, through indirect costs, to grantee institutions for library journal subscriptions and electronic site licenses.

NIH highly values traditional routes of research information dissemination through peer-reviewed journals. Peer review is a hallmark of quality and is vital for validating accuracy and interpretation. Publication in peer-reviewed journals is a major factor in determining professional standing and in making hiring, promotion, and tenure decisions. We also value the communities of research created by scientific organizations and the journals they publish.

NIH support is involved in approximately 65,000 articles per year. Using 2003 data, NLM estimates that publications resulting annually from NIH-funded research represent about 10% of the articles in the nearly 5000 journals indexed by PubMed. NIH-funded articles account for more than half of the total published articles for only 1% of these journals (*7*). It is unlikely that scientists and libraries would use the proposed public access policy to gain access to the scientific literature in lieu of their journal subscriptions, because if they did, they would be able to access only a fraction of a journal's content. In addition, there are many other components of journals, such as science news, industry information, literature reviews, job announcements, and other

products that bring value to the reader. These will not be a part of the NIH archive.

The proposed NIH policy will not affect the ability of NIH-funded investigators and journals to copyright works. Investigators may assign these rights to journals in accordance with current practice, and copyright holders may continue to enforce their rights as before. A member of the public viewing or downloading a copyrighted document from PMC is subject to the same rights and restrictions as when copying an article from the library. In addition, PMC includes a notice alerting the public to the rights of copyright holders and will continue to post this notice as part of any NIH public access system.

Some have expressed concern that archiving NIH-funded manuscripts in PMC will incur huge costs. In fact, by building on an existing information technology infrastructure housed at the NLM, the NIH public access policy can be exceptionally cost-effective. Our estimates of \$2 to \$4 million per year (*7*) reflect incremental costs from creating a Web site for the manuscripts and for XML tagging them into PubMed Central's archival format. Implementation of the proposed policy may result in certain efficiencies for our grantees, the majority of whom currently submit paper copies of their published articles for end-of-year reporting and for renewal competition.

NIH has received over 6000 comments on its proposed policy. We plan to make these available in a public reading room. Currently, the NIH Web site (www.nih.gov/about/publicaccess/index.htm) contains answers to frequently asked questions about the public access draft policy. Because our proposed policy is timely and flexible, NIH is confident that it will not only advance science, but also be advantageous to scientists, to publishers, and to the public.

References and Notes

1. "Enhanced public access to NIH research information" (Notice NOT-OD-04-064, NIH Guide to Grants and Contracts, 3 September 2004).
2. *Fed. Regist.* **69** (180), 56074 (17 September 2004).
3. See www.pubmedcentral.nih.gov/.
4. Internet Health Resources, Pew Internet and American Life Project, Washington, DC, 2003; available at www.pewinternet.org/pdfs/PIP_Health_Report_July_2003.pdf.
5. Cybercitizen Health 3.0 Survey, Table 10 (Manhattan Research, New York, 2003); available for purchase at www.manhattanresearch.com.
6. The estimated \$30 million is a conservative figure based on amounts spent on page charges and other publication costs on a sample of R01 grant application budgets, scaled up to provide an estimate of direct costs paid on all research grants.
7. Details are in the supporting online material.

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Supporting Online Material

www.sciencemag.org/cgi/content/full/306/5703/1895

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